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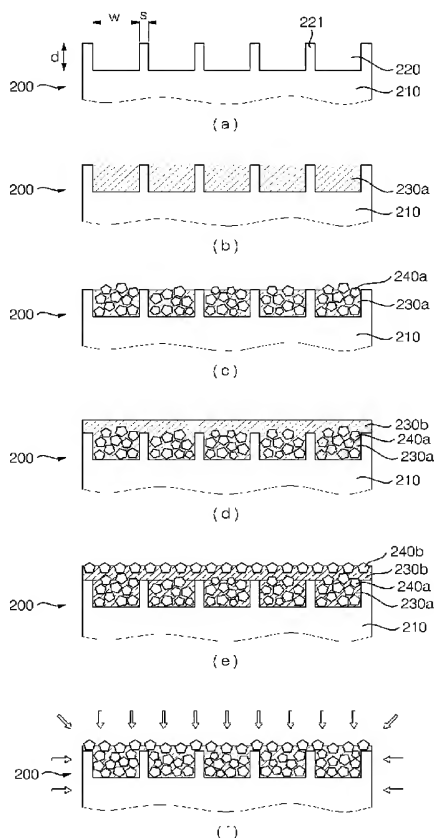
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(54) Title: DIAMOND TOOLS WITH MULTILAYERS OF ABRASIVE GRAIN AND METHOD FOR MANUFACTURING THE SAME



(57) Abstract: The present invention relates to a diamond tool and a method of manufacturing the same, wherein multiple abrasive layers are formed through a brazing or electroplating method, thereby improving the performance and service life of the tool. According to the method of the present invention, a plurality of concave portions are formed in a surface of the shank. A bonding paste is coated into the concave portions and abrasives are dispersed in the bonding paste to thereby form a lower abrasive layer. Again, a bonding material is coated on the lower abrasive layer and abrasives are dispersed in the bonding material to thereby form an upper abrasive layer. Then, a heat treatment is executed to fusion-bond the bonding material and abrasives onto the surface of the shank. Therefore, the diamond tools manufactured through a multiple brazing or electroplating method according to the invention can significantly extend the service life thereof, which has been a detrimental weakness of the conventional diamond tools having a single abrasive layer, in spite of various advantages of the brazing and electroplating methods. Furthermore, multiple abrasive layers can be formed inside the concave portions having a desired spacing, width and depth, thereby significantly improving the service life and the cutting performance of diamond tools.



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